

## **GENERAL INFORMATION**

The City of San Jose's Sewer System Management Plan, also called an SSMP, is a document that describes the activities that the City uses to manage its wastewater collection system effectively. Effective management of a collection system includes:

- Minimizing the number and impact of sanitary sewer overflows (SSOs);
- Providing sewer capacity to accommodate design storm flows; and
- Maintaining or improving the condition of the collection system infrastructure in order to provide reliable service into the future.

The preparation of this document required extensive collaboration between three City departments: Department of Transportation (DOT), Department of Public Works (DPW) and Environmental Services Department (ESD).

## **BACKGROUND INFORMATION**

San Jose, California, is located in Santa Clara County and is the largest city in the Bay Area. It is approximately 50 miles south of San Francisco and 390 north of Los Angeles.

San Jose at a glance (from the City of San Jose's website):

- Founded in 1777, San Jose was California's first civilian settlement
- Incorporated March 27, 1850, San José was California's first incorporated city and site of the first state capital.
- Incorporated area: 177.7 Square Miles
- San José is the third largest city in California, following Los Angeles and San Diego with a population of 974,000.
- Climate: Temperatures vary from an average of 50 degrees Fahrenheit in January to an average of 70 degrees Fahrenheit in July. San José boasts an average of more than 300 sunny days per year, and has a mean annual rainfall of 14.4 inches.

The City provides sewer services for the residents and businesses. The City owns and operates the sewer collection system consisting of approximately 2,200 miles of sanitary sewer mains (which vary in size from 6 inches to 90 inches in diameter), 45,000 manholes and 16 pump stations. The collected wastewater is conveyed to the City's Water Pollution Control Plant (WPCP) by major interceptor pipelines located in the northern part of San Jose.

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**SSMP DEVELOPMENT PLAN and SCHEDULE**

Main Task/Sub-Task	Task Description	Status	Target Date Completion	Executive Staff Responsible
Application for Waste Discharge Requirements Coverage	Submit Notice of Intent to the State identifying the agency's authorized representative including required permit fee.	Completed	Sept, 2006	Kevin O'Connor, Deputy Director DOT
Sanitary Sewer Overflow (SSO) Electronic Reporting	Reporting overflows to Statewide SSO database via Internet. All enrollees must obtain SSO database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS).	Completed Two Legally Responsible Officials were identified. Training was provided on 3/7/2007 at California Water Environmental Association sponsored workshop to perform continuous data entry.	May, 2007	Kevin O'Connor, Deputy Director DOT
Element 1 – Goals	Identify the goals that the SSMP enables the city to achieve.	Completed	Aug 31, 2006	Kevin O'Connor, Deputy Director DOT
Element 2 – Organizational Structure	Names and staff positions responsible for developing and implementing SSMP, including chain of communications for reporting SSOs.	Completed	Aug 31, 2006	Kevin O'Connor, Deputy Director DOT
Element 3 – Legal Authority	Agency's legal authority to operate and maintain its sewage collection system. Each enrollee must demonstrate, through	Completed	Aug 22, 2007	Melody Tovar, Deputy Director, ESD

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	sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the legal authority to prevent illicit discharges into its sanitary sewer system.			
Element 4 – Operations & Maintenance	See <u>a.</u> through <u>e.</u> , below.	Completed	Aug 22, 2007	See <u>a.</u> through <u>e.</u> , below.
a. Collection System Maps	Maintain up-to-date Sewer Maps, showing all gravity line segments, manholes, size of pipe and other pertinent sewer data.	DPW Geographical Information Systems (GIS) division maintains and continually updates sewer maps		Timm Borden, Deputy Director DPW
b. Preventive maintenance program	Written description of the preventative maintenance program activities the agency employs, including a system of scheduling regular maintenance and cleaning targeted at known problem areas.	DOT has created “high priority cleaning lists” and maintains these known target areas on a regular cleaning schedule		Kevin O’Connor, Deputy Director DOT
c. Rehabilitation & replacement program	Short and long term plan for the rehabilitation or replacement due to system deficiencies including CIP	Addressed by DPW’s Sanitary Sewer Capital Improvement Annual Budget and the five-year Capital Program		Timm Borden, Deputy Director DPW
d. Staff Training	Staff Operations & Maintenance training	Provide continuous		Kevin O’Connor,

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	and assurance that contractors are adequately trained.	training for staff. Plumber and sewer contractor outreach flyer sent to selected plumbers on 8/13/07 and made available at DPW Permit Counter.		Deputy Director DOT
e. Contingency Equipment & Replacement Inventories	Equipment and parts inventory including the identification of critical replacement parts	Completed		Kevin O'Connor, Deputy Director DOT
Element 5 – Design & Performance	See <u>a.</u> through <u>b.</u> , below	Completed	Aug 22, 2007	Timm Borden, Deputy Director DPW
a. Design Standards	Design standards for new and rehabilitated systems	Addressed by the existing DPW Standard Specifications and Standard Details.		
b. Inspection and testing	Inspection and testing standards for new and rehabilitated systems	Inspectors are trained and enforce the compliance of the sewers constructions to the Specifications and Details.		
Element 6 – Overflow Emergency Response Plan	Written procedures defining how the City responds to SSOs	Completed Addressed by the DOT's existing SSO reporting procedures.	Aug 31, 2006	Kevin O'Connor, Deputy Director DOT

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Element 7 – FOG Program	Fats, Oils and Grease controls	Completed Addressed by ESD's existing FOG Program	Aug 31, 2006	Melody Tovar, Deputy Director ESD
Element 8 – System Evaluation and Capacity Assurance Plan	Evaluate those portions of the system that are experiencing capacity related overflows. Establish steps to eliminate capacity related overflows including Inflow & Infiltration program and short and long term capacity issues.	DPW sanitary sewer current and future master planning efforts to address capacity assurance.	Aug 31, 2008	Timm Borden, Deputy Director DPW
Element 9 – Monitoring, Measurement and Program Modifications	Maintain records, monitor and assess the effectiveness of the program and update.	DOT, DPW and ESD staffs developing methods and data needed to assess effectiveness of SSMP and accurately report	Aug 31, 2008	Kevin O'Connor, Deputy Director DOT
Element 10 – SSMP Audits	Conduct periodic audits, at least every two years, on the effectiveness of the SSMP.	Working with BACWA on ways to ensure any audit criteria is appropriate and measurable.	Aug 31, 2008	Kevin O'Connor, Deputy Director DOT
Element 11 – Communications Program	The enrollee shall communicate on a regular basis with the public on the development, implementation and performance of its SSMP; provide opportunity for stakeholder input.	City has initiated the Communications Program and is working with BACWA on pertinent public communications program's	Aug 31, 2008	Kevin O'Connor, Deputy Director DOT

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		elements.		
Final SSMP, incorporating all of the SSMP requirements.	The final SSMP certification must be brought to City Council.		Aug 31, 2008	DOT, DPW, ESD